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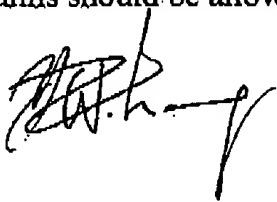
Dear Dr. Shun Lee, Examiner:

Thank you for your office action dated 10/12/06. I respect your action but I cannot agree your rejection to my claims 44-48, 50-57, and 59. The reasons are very simple:

- (1) As you pointed out: "The system of Hansen lacks an explicit description of a first objective lens in said first spectral band; and a second objective lens in said second spectral band." It means that Hansen only has a beam splitter to split the radiation into visible and near infrared (not long infrared in my invention) but does not have an optical system and detector to convert the radiation into optical or electronic image that is completely different from my system. In addition, there is a sensor fusion board in my system to realize pixel by pixel or picture in picture fusion. Hansen does not have this capability.
- (2) Owen has a patent to split the visible radiation and near infrared radiation (not long infrared) but he does not have a lens to correct the aberration from the objective lens because his lens is put behind the detector not before the detector so they cannot correct the aberrations from the objective lens. Our correction lenses are in the front of the detectors so they can correct the aberrations from the objective lens. I don't think you can find a patent that has a front lens element to split the radiation into the first spectral band (such as visible) and the second spectral band (such as long infrared) then has the first correcting lens in the front of the first spectral band detector to correct the aberration from the front lens element in the first band and has the second correcting lens in the front of the second spectral band detector to correct the aberration from the front lens element in the second band. Because of my unique design we only need to correct the aberration in the VIS band and LIR band individually not in a very large band from visible to long infrared jointly. The system design becomes easy. In addition, Owen's system uses two mirrors but I use a refractive lens that is also different.
- (3) Although I also have an alternative design to put a beam splitter in the front to split the radiation into two bands then use two independent objective lenses to get two images, it is also different from Hansen because as mentioned in your note, he does not have objective lenses and cannot get optical and electronic images simultaneously. Obviously Owen also cannot give any help to Hansen. Because the two objective lenses and two bands in my invention are independent, they can have the same field of view or different field of views, it means that a very narrow field of view (such laser radar) for target identification can be inside a very wide field of view (such as LIR) for quick target search that is very useful.
- (4) In addition to the above my key invention is simultaneous optical and electronic fusions because the optical fusion can give high definition image and the electronic fusion can do pixel by pixel fusion that the user needs. I don't think any of your referenced patents mentioned the simultaneous fusion.

Therefore, all my claims should be allowed. Thank you for your kind consideration.

Evan Zhang, PhD



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